

What is claimed is:

1. A method for controlling the cable winch of a snow-trail grooming vehicle comprising the following steps:

- detecting a chain speed or a magnitude proportional to the driving chain speed,
- detecting a cable speed or a magnitude proportional to the cable speed,
- comparing the detected chain speed and the detected cable speed or the magnitudes proportional thereto, and
- determining a desired value for the cable speed or the magnitude proportional thereto taking into consideration the comparison result for the cable winch control.

2. The method according to Claim 1, wherein when determining the desired value, a detected actual pulling force in the cable and a specifiable highest value for the pulling force are taken into consideration.

3. The method according to Claim 1, wherein a chain speed and a cable winch speed are detected.

4. The method according to Claim 1, wherein the cable speed or a magnitude proportional thereto is detected in accordance with its amount and its direction relative to a traveling direction or a longitudinal axis of the snow-trail grooming vehicle.

5. The method according to Claim 1, wherein when determining the desired value, an angle of slope between the traveling direction or the longitudinal axis of the vehicle and the horizontal and a direction of the cable speed relative to the traveling direction are taken into consideration.

6. The method according to Claim 1, wherein the detection of a slip of the chains or tracks of the snow-trail grooming vehicle is additionally considered when determining the desired value.

7. The method for controlling the cable winch of a snow-trail grooming vehicle, in particular according to Claim 1, comprising the following steps:

- detecting a traveling speed above ground of the snow-trail grooming vehicle according to direction and absolute value,
- detecting a cable speed according to direction and absolute value or a magnitude proportional to the cable speed,
- comparing the detected traveling speed above ground and the detected cable speed or the magnitude proportional thereto, and
- determining a desired value for the cable speed or the magnitude proportional thereto for controlling the cable winch taking into consideration the comparison result.

8. A snow-trail grooming vehicle including a cable winch, comprising means for detecting a chain or track speed, a magnitude proportional thereto and/or a traveling speed above ground, means for detecting a cable speed or a magnitude proportional thereto, means for comparing the detected cable speed and the detected chain or track speed or the magnitudes proportional thereto and/or the traveling speed above ground, and means for determining a desired value for the cable speed taking into consideration the comparison result.